

## **Appendix C**

### **Operational Mode Summary / Mission Profile**

NOTE: The original Operational Mode Summary / Mission Profile was approved December 1995.

Enclosed is a revised OMS/MP.

OPERATIONAL MODE SUMMARY/MISSION PROFILE  
FOR THE  
LAND WARRIOR ENSEMBLE

1. GENERAL

a. This is an update to the Land Warrior (LW) Operational Mode Summary/Mission Profile (OMS/MP) dated 18 Feb 94. It is based on the Land Warrior Draft Operational Requirements Document (ORD) Revised, 2-6 Apr 01 and the original OMS/MP.

b. The original OMS/MP has been revised to reflect information gained through experience with the system during its evolution to date and to conform to current defense planning guidance. As a living document, it will be updated as required.

2. SYSTEM DESCRIPTION AND BASIS OF ISSUE

a. System Description. The Land Warrior system will enhance the Infantry soldier's battlefield capabilities, and consequently the capabilities of small units, through the development and integration of an assortment of systems, components and technologies into a cohesive and combat effective system to achieve combat overmatch in the close fight.

b. System Type. The LW ensemble includes all the weapons, equipment, and subsistence items carried by the individual dismounted combat Soldier for personal use; integrated into a system to enhance his lethality, survivability, tactical (situational) awareness (i.e., command and control), mobility, sustainability, and training.

c. Components

(1) Weapon Subsystem. The LW system will use a variety of weapons common to the Infantry Soldier. Interface requirements will vary dependant upon the weapon. Some will be totally integrated, while others may only be partially integrated. Some will simply not interfere with the system's operation. Detailed listings of these weapons are provided in the Systems Interface Control Document for LW. Weapon related items included in the ensemble are: the lightweight or medium thermal weapons sight (TWS), the multifunctional laser (MFL) and digital compass (DC), the daylight video sight (DVS), close combat optic (CCO), and the weapon user interface (WUID).

(2) Computer/Radio Subsystem. The computer/radio subsystem contains the computer-processing card, mounted in the computer assembly module, plus additional components for the leader configuration. Leader systems include a handheld display with input device, keyboard, and interface cable. The target operating system for the system is Windows 2000 Professional. The computer will connect to the personal area network (described below).

(3) Soldier Control Subsystem (SCU). The SCU provides user interface control, user validation functions, and Soldier radio digital communications. The Soldier radio consists of a wireless LAN (WLAN) card and Voice-over-IP processor. The SCU contains a user interface for system controls and push-to-talk switch, and the Soldier access module to read personal information from a user configured data card. The SCU consists of the Soldier control unit (SCU) proper, a Soldier access module (SAM), a Soldier radio (wireless LAN), and a protective mask audio transducer.

(4) Navigation Subsystem. The navigation subsystem provides position and location information through a selective-availability anti-spoofing military GPS module, supplemented by an integrated navigation component [i.e., dead reckoning module (DRM)]. It connects to the GPS antenna. The GPS SASSM module requires crypto key initialization. This is accomplished by connecting an external device. The DRM provides GPS-aided and automated standalone Soldier navigational functions when GPS is degraded or unavailable. This subsystem consists of a global positioning system (GPS) module, a GPS antenna, and a dead reckoning module.

(5) Helmet Subsystem. The helmet subsystem interfaces with other LW modules to display information, provide a graphical user interface, and to distribute audio to and from the Soldier. It incorporates a modular design to allow Soldiers to configure the helmet with combinations of components to suit operational needs. The subsystem includes a helmet with a suspension system, brackets for mounting sensors, a display, an image intensifier, headset/microphone, interconnect cables, protective eyewear, a protective mask, system interface components, and laser interrogator-threat detector sensors (when laser sensors are installed).

(6) Power Subsystem. This system consists of rechargeable or disposable batteries. The primary battery is the rechargeable battery for operational and training use, and disposable batteries for contingency operations.

(7) Personal Area Network Subsystem. The PAN subsystem components implement the common LW data and power bus. The PAN is composed of a body network and weapon network. It includes cables, connectors and hubs. The PAN transfers IEEE-1394 (six wires), USB (two wires), and RF signals (two wires).

(8) Individual Combat ID for the Dismounted Soldier (ICIDS) Subsystem. This functionality, if available, functions as a remote combat ID system that supports the CIDDS communication interfaces. ICIDS consists of two components: the interrogator (I) and the transponder (T). The I-unit is mounted on the weapon and has three lasers: interrogate, MILES 2000, and aim. It also contains a RF receiver. The T-unit consists of laser sensors, antennae, microprocessor, and RF transmitters, which are body or helmet mounted. When the ICIDS Soldier receives a CID interrogation, the system sends a RF signal identifying the Soldier as friend. The interrogator announces the target as friend or unknown to the Soldier sending the query.

(9) MILES Subsystem. The Army's current fielded training system is the Multiple Integrated Laser Engagement System (MILES) 2000. MILES devices will be used primarily during force-on-force (FOF) exercises at home station from squad through brigade level to simulate the firing and effects of actual weapons systems. MILES 2000 is compatible with the current family of MILES devices. The LW systems will accommodate physical integration of MILES 2000 for training exercises, when ICIDS is not available.

(10) Protective Clothing and Equipment. LW personal equipment includes existing government-developed protective and mission related equipment. Some of these items are:

(a) Modular Lightweight Load Carrying Equipment (MOLLE). The LW MOLLE provides the physical foundation for mounting LW modules, as well as a means to secure, carry, and allow tailoring of the Infantry Soldier's load. The MOLLE system consists of a modular rucksack, with removable compartments and components, and a fighting load vest that can accept removable pockets for the rifleman, pistol, squad automatic weapon (SAW) gunner, and grenadier configurations. The modularity allows individuals to tailor the load to meet mission needs. One waist belt serves both the vest and backpack and allows quick release of the backpack from the waist belt. The MOLLE is made of woodland camouflage, water repellant-coated fabric.

(b) Joint Services Lightweight Integrated Suit Technology (JSLIST). The LW system will be operationally compatible with JSLIST. JSLIST components include a two piece over-garment to be worn over the battle dress uniform (BDU) and the multipurpose rain-snow-CB over-boot (MULO) to be worn over standard combat boots. These items, when combined with standard CB protective butyl gloves and masks for respiratory protection, allow complete MOPP flexibility.

(c) Interceptor Modular Body Armor. The LW system will accommodate interceptor modular body armor. The interceptor is composed of the outer tactical vest (OTV), collar, throat protector, groin protector, and small arms protective inserts (SAPI).

(d) Joint Chemical Agent Detector (JCAD). The LW system will interface with JCAD, a portable monitoring and small-point-chemical-agent-detector for aircraft, shipboard, and individual Soldier applications. It is a hand held, pocket-sized detector, which detects, identifies, and qualifies chemical agents. JCAD is an independent system that operates on batteries and provides both audible and visual alerts when a hazard is detected.

(e) MOLLE On-The-Move Hydration System. The MOLLE hydration system is a 2.96-liter Camelback canteen system.

(f) Combat Medic Ensemble. The combat medic vest will be integrated with the LW load-carrying component for the LW medic configuration.

(11) Support Subsystem. The LW support system includes external equipment used by the LW system for mission data development and transfer, battery recharging and maintenance equipment. In addition to test equipment (IFTE), an individual battery charger, and a platoon battery charger, included is a mission data support system. The mission data support system software will run on a dedicated LW external computer physically associated with Army command and control assets. MDS produced mission data sets will be transferred to the LW system through the external Ethernet connection or the standard LW PAN connector.

(12) Leader Radio. This sub-system includes a leader radio and radio antenna. The radio provides inter-squad secure digital voice and LW compatible message communications. It is only provided for Soldiers equipped with the LW leader configuration.

(13) Software Subsystem. The LW software subsystem provides user interface, automatic functions, storage and retrieval functions, and the central logical control of LW activities. It contains the operating systems and LW program-unique software. It provides anti-virus capability, a power management/conservation capability, and the ability implement standard map functions.

(14) External Interfaces. Included are various interfaces required to integrate into battlefield and support environments.

(15) Internal Interfaces. Included are various interfaces selected for interoperability, supportability, and commonality among the subsystems and components comprising the LW system.

(16) Human Interfaces. Human interfaces are developed through a structured MANPRINT process. Where government furnished equipment is provided, human interface considerations are included in the equipment design.

(17) Training Interfaces. The LW system will include embedded computer-based training capabilities and will interface to external training systems. LW will display user-selected help functions and embedded training material defined by the LW system specification.

d. System Function. The function of the LW system is totally dependent on which subsystem(s) is/are provided any given Soldier. Each subsystem (listed above) has a specific function (or group of functions), which can be discerned from the system description.

e. Basis of Issue. Soldiers in all Infantry maneuver battalions and smaller combat elements will be equipped with LW. Soldiers in direct support of LW equipped units will also be equipped with LW. Selected Marine units, Cavalry Scouts, and Special Operations Forces will also use LW.

### 3. MISSIONS.

a. System Mission. The mission of the LW ensemble is to enhance the lethality, survivability, tactical (situational) awareness (i.e., command and control), mobility, sustainability, and training of dismounted combat Soldiers.

b. Unit Missions. The LW ensemble will be used in all missions performed by the using units. The ensemble will serve the same purposes in offensive operations, defensive operations, and stability and support operations. Primarily, as part of the TOE for Infantry battalion, the LW ensemble will be employed by Infantry units during any/all missions listed in Chapters 3, 4, and 5 of Field Manual 7-20, The Infantry Battalion. In various instances, selected subsystems of the ensemble may be used for non-combat operations. (E.g., search and rescue, movement of civilians, and fighting forest fires, etc.)

4. ENVIRONMENT. The LW system will perform its assigned tasks in training, lethal, contaminated, or otherwise hazardous environments at minimum risk to friendly personnel. It will be employed throughout all operational continua and under all environmental conditions to which Infantry units are exposed. The system will be exposed to all fragmentation, concussion, blast, flame, and direct/indirect fire weapons, with potential of exposure to NBC and directed energy effects.

a. Environmental Exposure Matrix. This matrix identifies the potential of LW being employed for extended periods, in various environmental conditions, in the theater indicated. (Based on current Defense Planning Guidance approved scenarios.)

Environmental Exposure Matrix

Condition	NEA	SWA	EUR
Daylight	X	X	X
Darkness	X	X	X
Smoke	X	X	X
Haze/Fog	X	X	X
Dust	X	X	X
Rain	X		X
Sleet/Snow	X		X
High Humidity	X	X	X
Low Humidity	X	X	X
Temp >95 <sup>0</sup> F		X	
Temp <32 <sup>0</sup> F	X		X
Chemical		X	
Biological		X	
Nuclear			

b. Movement - Speed - Terrain Tables. The Movement Tables depict the percent of time spent during combat operations on three types of terrain (described in follow-up note). The speeds shown are average speeds attained during movement and do not account for prolonged stops (firing positions, lagers, etc). Inclement weather, limited visibility, heavy loads, or other factors may reduce these speeds.

Tracked Vehicle Movement

Terrain	Percent	Speed (kph)
Primary Road	10	48
Secondary Road	45	32
Cross Country	45	24

Wheeled Vehicle Movement

Terrain	Percent	Speed (kph)
Primary Road	10	48
Secondary Road	45	32
Cross Country	45	16

Foot Movement

Terrain	Percent	Speed (kph)
Primary Road	05	4.0
Secondary Road	20	4.0
Cross Country	75	2.4

NOTE: Primary Road = Any road which can be traversed by a two-wheel drive vehicle-- year round. Secondary Road = Any road which can be traveled by a two-wheel drive vehicle, if conditions are ideal (dry, graded, cleared); but may be impassable without four-wheel drive during certain periods of time (snow, rain, slides, washouts, drifting sand, etc.). Cross Country = terrain which is virtually impassable, except for four-wheel drive and/or tracked vehicles.

c. Movement During Sustained Combat Operations.

Manpacked Distance

Average distance per day during engagement:	5.4 Km
Probable minimum:	0 Km
Probable maximum:	40 Km

Vehicle Movement

Mode	Hi	Avg	
Lo			
Mechanized Carrier	720 Km	18.60 Km	0 Km
Wheeled Carrier/Truck	720 Km	13.82 Km	0 Km

d. Climatic Exposure. The following table depicts the expected climatic conditions under which the MPIM will be operating during the life cycle (Per AR 70-38).

TYPE	% FLEET
HOT	18
BASIC	80
COLD	02

Climatic Design Matrix

5. **THREATS TO THE SYSTEM.** The threat priority listed below was taken from the Land Warrior Systems Threat Assessment Report (STAR). The matrix depicts, in order, probable damage/destruction to Soldier-carried items by various battlefield systems.

Threat Priority Matrix

Priority	Threat
1	Fragmentation (artillery, grenades, mines, missiles, etc.), and/or bullets.
2	Blast-fuel-air-explosives, thermobaric, etc.
3	Flame and incendiary.
4	Laser, directed energy.
5	Chemical, Biological, or Radiological.
6	Radio Frequency Weapons
7	Electronic Countermeasures

## 6. REFERENCES.

AR 70-38, Research, Development, Test and Evaluation of Material for Extreme Climatic Conditions, Aug 79.  
 DA PAM 350-38, Standards in Weapons Training, Feb 93.  
 FM 7-8, Infantry Rifle Platoon and Squad, Apr 92.  
 FM 7-20, Infantry Battalion, Apr 92.  
 FM 7-11BCHM-SM-TG, Soldier's Manual and Training Guide, Sep 88.  
 FM 23-9, M16A1 & M16A2 Rifle Marksmanship, Jul 89.  
 FM 23-31, 40MM Grenade Launcher, M203 & M79, May 72.  
 FM 25-101, Battle Focused Training, Sep 90.  
 FM 90-10-1 HTF, Infantryman's Guide to Combat in Built-Up Areas, May 93.  
 FM 100-5, Operations, Jun 93.  
 SH 23-150 (USAIS), Combined Arms Training Strategy, Nov 92.



Operational Requirements Document for Land Warrior, 2-6 Apr 01.  
System Interface Control Document For the Land Warrior System, 8 Mar 01,

7. WARTIME MISSION PROFILES. (See Appendix A)
8. PEACETIME MISSION PROFILES. (TO BE DEVELOPED)
9. SUPPORT AND STABILITY OPERATIONS (SASO). The LW ensemble will be used in the same manner for SASO and/or wartime. Its principal mission will not change. Required use and resupply rates will vary according to the necessity of combat operations, the intensity and duration of combat operations, and METT-TC.

## Appendix A Wartime Mission Profiles

### 1. WARTIME MISSION PROFILES.

a. The included mission profiles are based on map vignettes, developed from currently approved (Defense Planning Guidance compliant) TRADOC low resolution scenarios. Input from LW subject matter experts has been included to update old assumptions with current knowledge. The times/number of occurrences provided in each profile is based on expected usage by one rifle squad member (identified in each profile). A column is provided for both the leader and soldier LW ensembles.

b. This OMS/MP projects the expected usage of the LW ensemble in six combat operations (listed below). The six combat operations were selected for analysis to provide a cross-representation of requirements anticipated for the system. Together, they constitute 138 hours of fighting. Throughout a year of combat, the LW may support these same operations repeatedly, some more than others, in no predictable sequence, and/or may never support one or more. It is estimated that any mix of combat operations of the same intensity and duration would produce approximately the same percentage of operational time for the system.

c. A description of each mission/operation is as follows:

(1) Attack (MOUT) depicts a rifle squad of an AASLT battalion, establishing a foothold in a large city and supporting the passage of follow-on forces. (12 Hours)

(2) Defense (MOUT) depicts a rifle squad of an AASLT battalion participating in a defense against a light force counterattack. (8 hours)

(3) Night Attack depicts a rifle squad of an airborne battalion attacking a company-sized force of light infantry (lightly reinforced) (16 Hours)

(4) Hasty Defense depicts a rifle squad of a light infantry company defending against a motorized rifle battalion attack. (6 hours)

(5) Rear Area Operations (RAO) depicts a rifle squad of a mechanized battalion providing security for COSCOM elements at an airfield. (48 Hours)

(6) Support and Stability Operations (SASO) depicts a rifle squad of a brigade combat team maintaining a road block/security position/check point. (48 Hours)

d. The mission profiles depict the use of one soldier ensemble and one leader ensemble.

## 2. NOTES.

### a. Abbreviations used in mission profile matrices:

Ea = Each, representing a single event.

Min = Minutes.

Rec = Receive.

X-mit = Transmit.

Edit = Developing, updating, editing, drawing, removing, adding, or otherwise manipulating data, test, symbols, or other displayed information.

DVS = Daylight Video Sight.

Orders = Warning, fragmentary, operations, or other orders.

Reports = Status, SITREP, or other orders.

IR Pointer/Illum = Infrared pointer or illuminator.

### b. Location: location related events are not reflected, as the LW system will:

Intermittently determine its location at a predetermined time/distance interval.

Intermittently broadcast its location at a predetermined time/distance interval.

Receive the locations of all other systems broadcasting within a specified range.

### c. The content of a range card and/or sector sketch is situation dependent.

Information on construction and use of both can be found in FM 7-8, Infantry Rifle Platoon and Squad.

<b>Wartime Mission Profile for the Land Warrior Ensemble: Hasty Defense (6 Hours)</b>		
<b>Event</b>	<b>Soldier Ensemble</b>	<b>Leader Ensemble</b>
Use Night Vision Device (min)	60	60
View Thermal Image (min)	127	0
DVS Image - Receive (ea)	0	0
- View (min)	0	0
- Capture (ea)	0	0
- X-mit (ea)	0	0
Map Display - View (min)	10	45
- Edit Symbols (ea)	0	0
Soldier Radio - X-mit (min)	5.5	17
- Rec (min)	15.5	28
Leader Radio - X-mit (min)	0	0
- Rec (min)	0	0
Detect Distance/Direction (ea)	0	0
Graphics - Receive (ea)	3	3
- View (min)	11	6
- Edit (ea)	0	6
- X-mit (ea)	0	3
Range Card - Receive (ea)	0	1
- View (min)	1	1
- Edit (ea)	1	0
- X-mit (ea)	0	1
Sector Sketch - Receive (ea)	0	0
- View (min)	0	5
- Edit (ea)	0	1
- X-mit (ea)	0	1
Overlay - Receive (ea)	0	0
- View (min)	0	0
- Edit (ea)	0	0
- X-mit (ea)	0	0
Orders - Receive (ea)	2	2
- View (min)	15	15
- Edit (ea)	0	1
- X-mit (ea)	0	2
Call for Medic - Receive (ea)	0	0
- View (min)	0	0
- Edit (ea)	0	0
- X-mit (ea)	0	0
Reports - Receive (ea)	0	0
- View (min)	0	0
- Edit (ea)	0	0
- X-mit (ea)	0	0
Fire Weapon (rds)	88	31
Use Close Combat Optic (min)	15	15
Use IR Pointer/Illuminator (min)	0	0
<b>Total System Operational Time (OT) (min)</b>	<b>360</b>	<b>360</b>

<b>Wartime Mission Profile for the Land Warrior Ensemble: Night Attack (16 Hours)</b>		
<b>Event</b>	<b>Soldier Ensemble</b>	<b>Leader Ensemble</b>
Use Night Vision Device (min)	265	130
View Thermal Image (min)	53.3	130.34
DVS Image - Receive (ea)	0	3
- View (min)	61	3
- Capture (ea)	6	0
- X-mit (ea)	6	0
Map Display - View (min)	40	85
- Edit Symbols (ea)	3	0
Soldier Radio - X-mit (min)	8	15.5
- Rec (min)	13	29.5
Leader Radio - X-mit (min)	0	7.5
- Rec (min)	0	7
Detect Distance/Direction (ea)	3	0
Graphics - Receive (ea)	0	0
- View (min)	0	0
- Edit (ea)	0	0
- X-mit (ea)	0	0
Range Card - Receive (ea)	0	0
- View (min)	0	0
- Edit (ea)	0	0
- X-mit (ea)	0	0
Sector Sketch - Receive (ea)	0	0
- View (min)	0	0
- Edit (ea)	0	0
- X-mit (ea)	0	0
Overlay - Receive (ea)	0	2
- View (min)	0	6
- Edit (ea)	0	0
- X-mit (ea)	0	1
Orders - Receive (ea)	2	2
- View (min)	15	15
- Edit (ea)	0	1
- X-mit (ea)	0	2
Call for Medic - Receive (ea)	0	1
- View (min)	0	1
- Edit (ea)	0	1
- X-mit (ea)	1	0
Reports - Receive (ea)	0	0
- View (min)	0	0
- Edit (ea)	0	1
- X-mit (ea)	0	1
Fire Weapon (rds)	89	30
Use Close Combat Optic (min)	0	0
Use IR Pointer/Illuminator (min)	2.97	1.95
<b>Total System Operational Time (OT) (min)</b>	<b>660</b>	<b>660</b>

<b>Wartime Mission Profile for the Land Warrior Ensemble: MOUT Attack (12 Hours)</b>		
<b>Event</b>	<b>Soldier Ensemble</b>	<b>Leader Ensemble</b>
Use Night Vision Device (min)	45	45
View Thermal Image (min)	16	16
DVS Image - Receive (ea)	45	17
- View (min)	0	10
- Capture (ea)	0	0
- X-mit (ea)	0	0
Map Display - View (min)	5.5	11
- Edit Symbols (ea)	0	0
Soldier Radio - X-mit (min)	9.5	27
- Rec (min)	26.5	48
Leader Radio - X-mit (min)	0	0
- Rec (min)	0	0
Detect Distance/Direction (ea)	6	0
Graphics - Receive (ea)	0	0
- View (min)	0	0
- Edit (ea)	0	15
- X-mit (ea)	0	3
Range Card - Receive (ea)	0	4
- View (min)	0	10
- Edit (ea)	1	0
- X-mit (ea)	1	0
Sector Sketch - Receive (ea)	0	0
- View (min)	0	0
- Edit (ea)	0	10
- X-mit (ea)	0	1
Overlay - Receive (ea)	0	0
- View (min)	0	0
- Edit (ea)	0	0
- X-mit (ea)	0	0
Orders - Receive (ea)	2	2
- View (min)	15	15
- Edit (ea)	0	1
- X-mit (ea)	0	2
Call for Medic - Receive (ea)	0	0
- View (min)	0	0
- Edit (ea)	0	0
- X-mit (ea)	0	0
Reports - Receive (ea)	0	0
- View (min)	0	0
- Edit (ea)	0	0
- X-mit (ea)	0	0
Fire Weapon (rds)	66	0
Use Close Combat Optic (min)	20	5
Use IR Pointer/Illuminator (min)	0	0
<b>Total System Operational Time (OT) (min)</b>	<b>720</b>	<b>720</b>

<b>Wartime Mission Profile for the Land Warrior Ensemble: MOUT Defense (8 Hours)</b>		
<b>Event</b>	<b>Soldier Ensemble</b>	<b>Leader Ensemble</b>
Use Night Vision Device (min)	150	150
View Thermal Image (min)	70	70
DVS Image - Receive (ea)	0	15
- View (min)	20	1
- Capture (ea)	0	0
- X-mit (ea)	0	0
Map Display - View (min)	11	21
- Edit Symbols (ea)	0	0
Soldier Radio - X-mit (min)	11.5	16
- Rec (min)	10.5	31
Leader Radio - X-mit (min)	0	0
- Rec (min)	0	0
Detect Distance/Direction (ea)	6	0
Graphics - Receive (ea)	0	0
- View (min)	0	0
- Edit (ea)	0	0
- X-mit (ea)	0	0
Range Card - Receive (ea)	0	4
- View (min)	0	10
- Edit (ea)	10	0
- X-mit (ea)	1	0
Sector Sketch - Receive (ea)	0	0
- View (min)	0	0
- Edit (ea)	0	10
- X-mit (ea)	0	1
Overlay - Receive (ea)	0	0
- View (min)	0	0
- Edit (ea)	0	0
- X-mit (ea)	0	0
Orders - Receive (ea)	2	2
- View (min)	15	20
- Edit (ea)	0	1
- X-mit (ea)	0	2
Call for Medic - Receive (ea)	0	0
- View (min)	0	0
- Edit (ea)	0	0
- X-mit (ea)	0	0
Reports - Receive (ea)	0	0
- View (min)	0	0
- Edit (ea)	0	6
- X-mit (ea)	0	2
Fire Weapon (rds)	104	36
Use Close Combat Optic (min)	0	0
Use IR Pointer/Illuminator (min)	3.47	2.34
<b>Total System Operational Time (OT) (min)</b>	<b>480</b>	<b>480</b>

<b>Wartime Mission Profile for the Land Warrior Ensemble: RAO (48 Hours)</b>		
<b>Event</b>	<b>Soldier Ensemble</b>	<b>Leader Ensemble</b>
Use Night Vision Device (min)	495	495
View Thermal Image (min)	276	120
DVS Image - Receive (ea)	0	8
- View (min)	5	8
- Capture (ea)	2	0
- X-mit (ea)	2	4
Map Display - View (min)	6	20
- Edit Symbols (ea)	0	0
Soldier Radio - X-mit (min)	11	31
- Rec (min)	17	31
Leader Radio - X-mit (min)	0	16
- Rec (min)	0	22
Detect Distance/Direction (ea)	21	22
Graphics - Receive (ea)	1	2
- View (min)	2	4
- Edit (ea)	0	4
- X-mit (ea)	0	2
Range Card - Receive (ea)	0	8
- View (min)	3	8
- Edit (ea)	2	0
- X-mit (ea)	2	0
Sector Sketch - Receive (ea)	0	0
- View (min)	0	8
- Edit (ea)	0	2
- X-mit (ea)	0	2
Overlay - Receive (ea)	2	1
- View (min)	9	5
- Edit (ea)	0	2
- X-mit (ea)	0	1
Orders - Receive (ea)	2	1
- View (min)	7	14
- Edit (ea)	0	1
- X-mit (ea)	0	1
Call for Medic - Receive (ea)	0	0
- View (min)	0	0
- Edit (ea)	0	0
- X-mit (ea)	0	0
Reports - Receive (ea)	0	20
- View (min)	0	26
- Edit (ea)	5	6
- X-mit (ea)	5	5
Fire Weapon (rds)	22	22
Use Close Combat Optic (min)	0	0
Use IR Pointer/Illuminator (min)	0.73	1.43
<b>Total System Operational Time (OT) (min)</b>	<b>1,590</b>	<b>2,100</b>



<b>Wartime Mission Profile for the Land Warrior Ensemble: SASO (48 Hours)</b>		
<b>Event</b>	<b>Soldier Ensemble</b>	<b>Leader Ensemble</b>
Use Night Vision Device (min)	510	480
View Thermal Image (min)	170	75
DVS Image - Receive (ea)	0	16
- View (min)	30	16
- Capture (ea)	12	0
- X-mit (ea)	12	12
Map Display - View (min)	12	24
- Edit Symbols (ea)	0	0
Soldier Radio - X-mit (min)	25	38
- Rec (min)	25	44
Leader Radio - X-mit (min)	0	34
- Rec (min)	0	44
Detect Distance/Direction (ea)	62	12
Graphics - Receive (ea)	10	2
- View (min)	20	10
- Edit (ea)	0	10
- X-mit (ea)	0	10
Range Card - Receive (ea)	0	20
- View (min)	0	20
- Edit (ea)	9	0
- X-mit (ea)	9	0
Sector Sketch - Receive (ea)	0	0
- View (min)	0	0
- Edit (ea)	0	7
- X-mit (ea)	0	7
Overlay - Receive (ea)	9	5
- View (min)	29	23
- Edit (ea)	0	9
- X-mit (ea)	0	10
Orders - Receive (ea)	13	7
- View (min)	46	36
- Edit (ea)	0	11
- X-mit (ea)	0	11
Call for Medic - Receive (ea)	0	0
- View (min)	0	0
- Edit (ea)	0	0
- X-mit (ea)	0	0
Reports - Receive (ea)	0	38
- View (min)	0	38
- Edit (ea)	19	14
- X-mit (ea)	19	13
Fire Weapon (rds)	10	0
Use Close Combat Optic (min)	1	0
Use IR Pointer/Illuminator (min)	0.33	0.85
<b>Total System Operational Time (OT) (min)</b>	<b>2,340</b>	<b>2,100</b>

Wartime Mission Profile for the Land Warrior Ensemble				Total Events/OT		
Event	Soldier Ensemble			Leader Ensemble		
	138 Hrs CT OT min/ea	138 Hrs CT OT hrs	Annual OT hrs/ea	138 Hrs OT OT min/ea	138 Hrs OT OT hrs	Annual OT OT hrs
Use Night Vision Device (min)	1525.00	25.42	762.50	1360.00	22.67	680.00
View Thermal Image (min)	712.30	11.87	356.15	411.34	6.86	205.67
DVS Image - Receive (ea)	45.00	n/a	1350.00	59.00	n/a	1770.00
- View (min)	116.00	1.93	58.00	38.00	0.63	19.00
- Capture (ea)	20.00	n/a	600.00	-	n/a	-
- X-mit (ea)	20.00	n/a	600.00	16.00	n/a	8.00
Map Display - View (min)	84.50	1.41	42.25	206.00	3.43	103.00
- Edit Symbols (ea)	3.00	n/a	90.00	-	n/a	-
Soldier Radio - X-mit (min)	70.50	1.18	35.25	144.50	2.41	72.25
- Rec (min)	107.50	1.79	53.75	211.50	3.53	105.75
Leader Radio - X-mit (min)	-	-	-	57.50	0.96	28.75
- Rec (min)	-	-	-	73.00	1.22	36.50
Detect Distance/Direction (ea)	98.00	n/a	2940.00	34.00	n/a	1020.00
Graphics - Receive (ea)	14.00	n/a	420.00	7.00	n/a	210.00
- View (min)	33.00	0.55	16.50	20.00	0.33	10.00
- Edit (ea)	-	n/a	-	35.00	n/a	1050.00
- X-mit (ea)	-	n/a	-	18.00	n/a	540.00
Range Card - Receive (ea)	-	n/a	-	37.00	n/a	1110.00
- View (min)	4.00	0.07	2.00	49.00	0.82	24.50
- Edit (ea)	23.00	n/a	11.50	-	n/a	-
- X-mit (ea)	13.00	n/a	6.50	1.00	n/a	30.00
Sector Sketch - Receive (ea)	-	n/a	-	-	n/a	-
- View (min)	-	-	-	13.00	0.22	6.50
- Edit (ea)	-	n/a	-	30.00	n/a	900.00
- X-mit (ea)	-	n/a	-	12.00	n/a	360.00
Overlay - Receive (ea)	11.00	n/a	330.00	8.00	n/a	240.00
- View (min)	38.00	0.63	19.00	34.00	0.57	17.00
- Edit (ea)	-	n/a	-	11.00	n/a	330.00
- X-mit (ea)	-	n/a	-	12.00	n/a	360.00
Orders - Receive (ea)	23.00	n/a	690.00	16.00	n/a	480.00
- View (min)	113.00	1.88	56.50	115.00	1.92	57.50
- Edit (ea)	-	n/a	-	16.00	n/a	480.00
- X-mit (ea)	-	n/a	-	20.00	n/a	600.00
Call for Medic - Receive (ea)	-	n/a	-	1.00	n/a	30.00
- View (min)	-	-	-	1.00	0.02	0.50
- Edit (ea)	-	n/a	-	1.00	n/a	30.00
- X-mit (ea)	1.00	n/a	30.00	-	n/a	-
Reports - Receive (ea)	-	n/a	-	58.00	n/a	1740.00
- View (min)	-	-	-	64.00	1.07	32.00
- Edit (ea)	24.00	n/a	720.00	27.00	n/a	810.00
- X-mit (ea)	24.00	n/a	720.00	21.00	n/a	630.00
Fire Weapon (rds)	379.00	n/a	11370.00	119.00	n/a	3570.00
Use Close Combat Optic (min)	36.00	0.60	18.00	20.00	0.33	10.00
Use IR Pointer/Illuminator (min)	7.50	0.13	3.75	6.57	0.11	3.29
<b>Total System OT (min)</b>	<b>6150.00</b>	<b>102.50</b>	<b>3075.00</b>	<b>6420.00</b>	<b>107.00</b>	<b>3210.00</b>

